

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Larry D. Barto, Steven C. Nettles, Yiwei Li
Assignee: Advanced Micro Devices, Inc.
Title: Starvation Avoidance Lot Start Agent (SALSA)
Serial No.: Unknown Filing Date: Herewith
Docket No.: M-7511 US Client Ref. No.: TT3418

San Jose, California
April 3, 2001

BOX PATENT APPLICATION
COMMISSIONER FOR PATENTS
Washington, D. C. 20231

PRELIMINARY AMENDMENT AND REMARKS

Dear Sir:

The following Amendments and Remarks are submitted for entry into the application filed herewith.

AMENDMENTS

In the Specification

Page 34, Table 2.1, Row 11, please revise the information in the specification as follows; a mark-up version of the amendment is shown in Appendix A:

TDE-0000-20230403-00000000

TABLE 2.1

Assume B = 6 lots per batch and WafersPerLot = 25 wafers per lot.
In operation (1), WaferStarts = B*(WafersPerLot) = 6*25 = 150 wafers
In operation (2), assume remaining wafers starts (RW_T) > 150 wafers, thus WaferStarts is unchanged
In operation (3), assume previous Starts = 0, thus Starts = 0 + WaferStarts = 150
In operation (4), assume product P_i is chosen to start all 150 wafers
In operation (5), calculate consumption time of 150 wafers of product P_i
In Figure 6, product P_i has a processing time $D_{i,g}$ = 2 minutes per wafer at the first "etcher" bottleneck occurrence at step 4.
When 150 wafers are released into the manufacturing line, they will immediately become part of bottleneck segment 1.
The virtual WIP that will be added to segment 1 is derived by the formula on line 12 of page 22, substituting WaferStarts as the additional WIP in segment 1: $V_{i,g} = (D_{i,g} / M) * \text{WaferStarts}$
Assume M = 2 machines.
Then consumption time for 150 WaferStarts at the first bottleneck occurrence is: Consumption Time = $(2 / 2) * 150 = 150$ minutes
Thus operation (5) increases the delta VWIP (DV _i) for this bottleneck by 150 minutes: $DV_i = DV_i + 150$

REMARKS

This preliminary amendment is being filed concurrently with the application so as to correct a minor typographical error. No new matter is being added. If there are any issues or questions regarding this preliminary amendment, please call the undersigned at (512) 794-3600.

EXPRESS MAIL LABEL NO:

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Respectfully submitted,



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APPENDIX B

The Preliminary Amendment amends the Specification to read as follows:

TABLE 2.1

Assume B = 6 lots per batch and WafersPerLot = 25 wafers per lot.
In operation (1), WaferStarts = B*(WafersPerLot) = 6*25 = 150 wafers
In operation (2), assume remaining wafers starts (RW_T) > 150 wafers, thus WaferStarts is unchanged
In operation (3), assume previous Starts = 0, thus Starts = 0 + WaferStarts = 150
In operation (4), assume product P_i is chosen to start all 150 wafers
In operation (5), calculate consumption time of 150 wafers of product P_i
In Figure 6, product P_i has a processing time $D_{i,g}$ = 2 minutes per wafer at the first "etcher" bottleneck occurrence at step 4. When 150 wafers are released into the manufacturing line, they will immediately become part of bottleneck segment 1. The virtual WIP that will be added to segment 1 is derived by the formula on line 12 of page 22, substituting WaferStarts as the additional WIP in segment 1: $V_{i,g} = (D_{i,g} / M) * WaferStarts$
Assume M = 2 machines.
Then consumption time for 150 WaferStarts at the first bottleneck occurrence is: Consumption Time = (2 / 2) * 150 = 150 minutes
Thus operation [(4)] (5) increases the delta VWIP (DV_i) for this bottleneck by 150 minutes: $DV_i = DV_i + 150$